

REMARKS

Status of the Claims

Claims 1-30 are pending in this application. Claims 1, 9-11, 16-17 and 25-27 are amended herein. Support for the amendments to the claims can be found in the specification, figures and claims as originally filed, for example, at least on page 6, lines 20-25 of the application as filed. Applicants submit that the amendments to the claims introduce no new matter.

Rejection Under 35 U.S.C. § 102

Claims 1-8 and 15-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by International Publication No. WO 99/62580 to Sinderby *et al.* (“Sinderby”). Applicants respectfully traverse the rejection for at least the reasons set forth below.

The Examiner considered the arguments filed with the amendment of August 3, 2007 by the Applicants but still deems that Sinderby has the required components for sensing electrical activity during expiration, even though Sinderby does not explicitly disclose such a function.

In order to overcome the rejection of claims 1-8, claim 1 has been amended to recite a method of controlling positive pressure assist to a patient during expiration, the method comprising an operation of “*adjusting a level of positive pressure assist to the patient during expiration in response to the level of electrical activity measured during expiration*”. Amended claim 1 further indicates that “*adjusting the level of positive pressure assist to the patient during expiration comprises minimizing the level of electrical activity of the patient’s respiration-related muscle during expiration.*” Further still, amended claim 1 indicates that “*minimizing the level of electrical activity of the patient’s respiration-related muscle during expiration controls stress on the respiration-related muscle while avoiding patient’s lung collapse.*”

Sinderby discloses a system for adjusting a level of inspiratory support in proportion to changes in the neuro-ventilatory efficiency so that the neural drive remains stable. The neuro-ventilatory efficiency is a function of the electromyographic (EMG) signal and a given inspiratory volume. See Sinderby at Abstract.

In contrast, amended claim 1 recites a method of controlling a positive pressure assist during expiration which comprises minimizing the level of electrical activity of the patient's respiration-related muscle thereby controlling stress on the respiration-related muscle while avoiding patient's lung collapse.

Sinderby fails to teach or suggest control of the stress on a respiration-related muscle while avoiding patient's lung collapse. Also, Sinderby fails to teach or suggest minimizing the level of electrical activity of the patient's respiration-related muscle during expiration so as to control stress on the respiration-related muscle while avoiding patient's lung collapse. Furthermore, Sinderby fails to teach or suggest such operations performed during patient's expiration, including measuring the level of electrical activity of the patient's respiration-related muscle during expiration.

In view of the above arguments, it is respectfully submitted that the subject matter of amended claim 1 distinguishes the present invention over the teaching of Sinderby.

Similar amendments have been introduced into claims 16 and 17, which are the device counterparts of method claim 1.

The above comments equally apply to amended independent claims 16 and 17. Therefore, it is respectfully submitted that the subject matter of amended claims 16 and 17 also distinguishes the present invention over the teaching of Sinderby.

Since claims 2-15 and 18-30 are dependent upon amended independent claims 1 or 17, which are believed to distinguish the present invention over the cited art, those dependent claims are also believed to distinguish the present invention over the prior art.

The Applicants thank the Examiner for indicating that dependent claims 9-14 and 24-30 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.


Accordingly, claims 9-11 have been drafted into independent form including limitations of their base claim and other intervening claims. In the same manner, claims 25-27 have been drafted into independent form including limitations of their base claim and other intervening claims.

In view of the above arguments, Applicants respectfully submit that claims 1-30 are allowable over the teaching of Sinderby. Accordingly, Applicants submit that claims are in condition for allowance.

Respectfully submitted,

Date: February 7, 2008
Reg. No. 58,343

Tel. No.: (617) 261-3216
Fax No.: (617) 261-3175



Karen A. Sinclair
Attorney for Applicant(s)
Kirkpatrick & Lockhart Preston
Gates Ellis LLP
State Street Financial Center
One Lincoln Street
Boston, Massachusetts 02111-2950